

WHAT IS CLAIMED:

310A1 1. A shoe press for processing a fibrous material web, comprising:
two shoe press units arranged to form an essentially level press nip elongated
in a web travel direction;
each of said two shoe press units comprising a circulating flexible, continuous
sealing belt and a press shoe, such that said circulating flexible, continuous sealing
belt is arranged to be guided over said press shoe in a region of said press nip; and
at least two driven continuous press belts arranged such that at least one of said
at least two driven continuous press belts are positioned on each side of the fibrous
material web to guide the fibrous material web through said press nip.

2. The shoe press in accordance with claim 1, wherein said fibrous
material web comprises one of a paper and a cardboard web.

310A2 3. ~~The shoe press in accordance with claim 1, wherein each of said at least
two press belts comprise a dewatering belt.~~

4. The shoe press in accordance with claim 1, further comprising at least
two felts arranged on opposite sides of the fibrous material web, whereby said press
nip comprises a double-felted press nip,
wherein said at least two felts are arranged between said press belts, such that
said at least two felts are guided substantially horizontally through said press nip
together with the fibrous material web.

5. The shoe press in accordance with claim 1, wherein at least one of said
two shoe press units comprises a shoe press roll and said sealing belt comprises a
jacket of said shoe press roll.

310B1 6. ~~The shoe press in accordance with claim 1, wherein a press plane
through said press nip is inclined in relation to a vertical reference.~~

7. The shoe press in accordance with claim 6, wherein said press plane is

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inclined in relation to the vertical reference by an angle (α) in the region of approximately 10° to approximately 45°.

8. The shoe press in accordance with claim 1, wherein at least one of said at least two press belts comprises an open press surface.

3b A3 9. The shoe press in accordance with claim 7, wherein a press surface of said at least one press belt is at least one of blind bored and grooved.

10. The shoe press in accordance with claim 1, wherein at least one of said at least two press belts comprises a water permeable wire web.

11. The shoe press in accordance with claim 10, wherein at least one of said at least two sealing belts comprises an open press surface that is at least one of blind bored and grooved.

3b A4 12. The shoe press in accordance with claim 11, wherein said at least one water permeable wire web press belt and said at least one open press surface sealing belt are arranged in a same press shoe unit.

13. The shoe press in accordance with claim 1, further comprising at least one deflection roll and a collector positioned in a region of said at least one deflection roll,

wherein, subsequent to said press nip, at least one of said at least two press belts is guided around said at least one deflection roll, whereby water thrown off said press belt as it is guided around said at least one deflection roll is collected in said collector.

14. The shoe press in accordance with claim 13, further comprising a scraper allocated to said at least one deflection roll.

15. The shoe press in accordance with claim 13, wherein said at least one deflection roll is driven.

16. The shoe press in accordance with claim 15, further comprising at least

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one additional driven deflection roll around which said at least one press belt is guided.

17. The shoe press in accordance with claim 16, wherein said at least one deflection roll is structured and arranged as a belt travel control roll.

18. The shoe press in accordance with claim 1, wherein press surfaces of said at least two press belts have a same hardness.

19. The shoe press in accordance with claim 1, wherein at least one of said at least two sealing belts comprises a continuous, smooth surface.

3bA5 20. The shoe press in accordance with claim 1, wherein felts with few markings are guided through said press nip, and said felts are arranged to cause symmetrical dewatering.

3bB2 21. The shoe press in accordance with claim 1, wherein, outside of said press nip, said at least two press belts are guided separately from said at least two sealing belts.

22. The shoe press in accordance with claim 1, wherein, prior to said press nip, at least one of said at least two press belts is guided around a deflection roll structured and arranged as a belt travel control roll.

3bA6 23. A press section of a machine for producing a fibrous material web, comprising:

a shoe press including two shoe press units arranged to form an essentially level press nip elongated in a web travel direction;

each of said two shoe press units comprising a circulating flexible, continuous sealing belt and a press shoe, such that said circulating flexible, continuous sealing belt is arranged to be guided over said press shoe in a region of said press nip; and

each of said two shoe press units comprising at least one driven continuous press belt, such that at least one driven continuous press belt is positioned on each

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side of the fibrous material web to guide the fibrous material web through said press nip.

24. The press section in accordance with claim 23, wherein the fibrous material web comprises at least one of a paper and a cardboard web.

25. The press section in accordance with claim 23, wherein said shoe press is the only press.

26. The press section in accordance with claim 23, further comprising at least two felts arranged on opposite sides of the fibrous material web, whereby said press nip comprises a double-felted press nip,

wherein said at least two felts are arranged between said press belts, such that said at least two felts are guided substantially horizontally through said press nip together with the fibrous material web.

jobA7 27. The press section in accordance with claim 23²⁶ wherein the fibrous material web is accepted by one of said at least two felts from a wire belt .

28. The press section in accordance with claim 27, further comprising a suctioned guidance roll located in a region of a transfer position,

wherein at least one of said at least two felts is guided around said suctioned guidance roll.

29. The press section in accordance with claim 27, wherein the fibrous material web is accepted from the wire belt by an upper felt.

30. The press section in accordance with claim 27, wherein said at least two felts are brought together before said press nip and are subsequently guided to said press nip while sandwiching the fibrous material web.

31. The press section in accordance with claim 27, further comprising a suctioned guidance roll arranged downstream, relative to a web run direction, from said press nip,

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wherein the fibrous material web is guided out of said press nip together with said at least two felts and is subsequently guided together with one of said at least two felts around said suctioned guidance roll, which is located in a region in which the fibrous material web is accepted by another section of the machine.

32. The press section in accordance with claim 31, wherein a drying wire is guided in the region of said suctioned guidance roll to accept the fibrous material web from said one felt.

33. The press section in accordance with claim 32, wherein the one felt comprises a lower felt, such that the fibrous material web is accepted from said lower felt by the drying wire.

34. The press section in accordance with claim 32, further comprising another guidance roll arranged to guide said one felt,

wherein the fibrous material web is accepted by the drying wire in a region between said suctioned guidance roll and said another guidance roll.

35. The press section in accordance with claim 32, wherein the drying wire is guided around a suctioned guidance roll in the region of acceptance.

36. The press section in accordance with claim 27, wherein said at least two press belts are arranged to be separated immediately after said press nip from said at least two felts which sandwich the fibrous material web.

37. A shoe press for processing a fibrous material web, comprising:
first and second shoe press units arranged to form an essentially level press nip elongated in a web travel direction;

said first shoe press unit comprising a first circulating flexible, continuous sealing belt and a first press shoe, such that said first circulating flexible, continuous sealing belt is arranged to be guided over said first press shoe in a region of said press nip;

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said second shoe press unit comprising a second circulating flexible, continuous sealing belt and a second press shoe, such that said second circulating flexible, continuous sealing belt is arranged to be guided over said second press shoe in a region of said press nip;

first and second continuous press belts arranged such that said first continuous press belt is positioned between said first press shoe and the fibrous material web, and said second continuous press belt is positioned between said second press shoe and the fibrous material web; and

first and second press belt driving devices arranged to drive said first and said second press belts, respectively.

38. The shoe press in accordance with claim 37, further comprising first and second felts arranged to sandwich the fibrous material web.

39. The shoe press in accordance with claim 38, wherein said first and second felts are arranged between said first and second press belts.

40. The shoe press in accordance with claim 37, wherein a pressing plane of said press nip is obliquely oriented in relation to a vertical reference.

41. The shoe press in accordance with claim 40, wherein said pressing plane is obliquely oriented at an angle of between about 10° and about 45° from the vertical reference.

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